



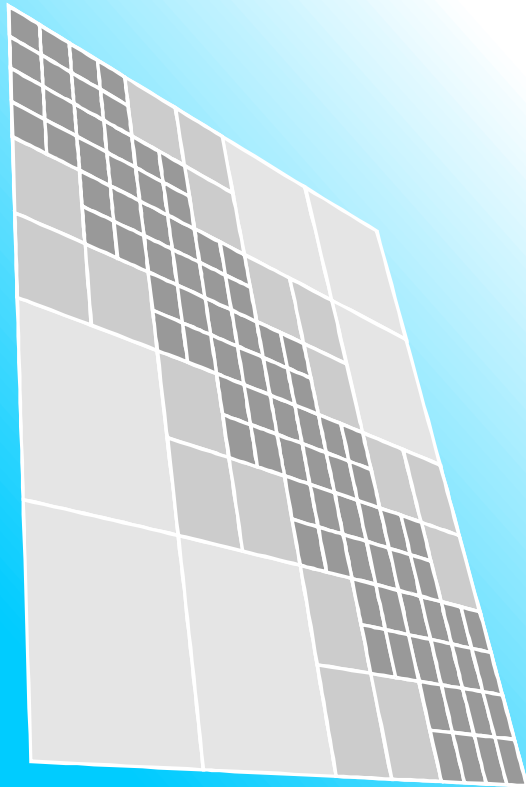
Zürich summer school

Organizers: S. Sauter (Universität Zürich), Ch. Schwab (ETH Zürich)

6.9. - 10.9.2004

Fast algorithms for integral operators Theory - Algorithms - Applications

$$K[u](x) = \int_{\Gamma} k(x,y)u(y) dy$$



Discretization of integral equations

- Introduction to integral equations
- Galerkin and collocation methods
- A priori and a posteriori error estimates
- Problem adapted meshes and adaptivity

Fast algorithms for integral operators

- Cluster techniques
- Adaptive wavelet compression
- Implementation
- H-matrix techniques

Applications in

- Electromagnetics
- Finance

Plenary Lecturers:

W. Dahmen - RWTH Aachen

W. Hackbusch - MPI Leipzig

J.C. Nédélec - École Polytechnique Paris

S. Sauter - Universität Zürich

Ch. Schwab - ETH Zürich

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Application deadline: 18.6.2004

